1. Write a Python program that prompts the user to input a list of numbers separated by spaces in a single line. Your program should then:
<ol> <li>Calculate the Sum of all the numbers.</li> <li>Calculate the Average of the numbers, rounded to two decimal places.</li> <li>Find the Maximum and Minimum values from the list of numbers.</li> </ol>
Finally, print the calculated values in a clear format.
Input
Enter numbers (space-separated): 10 20 30 40 50
Output
Sum: 150
Average: 30.0
Max: 50
Min: 10
2. Write a Python program that prompts the user to input a sentence containing multiple words separated by spaces. Your program should then:
<ol> <li>Identify and print the longest word in the sentence.</li> <li>Print the length of this longest word.</li> </ol>
Input:
Enter a sentence: The Lexus LFA has best v10 sounding engine.
Output :
Longest word: sounding

Length: 8

## 3. Find the Maximum Element in an Array

You are given an array of integers. Your task is to find and print the maximum element in the array.

### **Input Format:**

- 1. The first line contains total test cases. Next two line contains a single test case.
- 2. The first line of test case contains an integer N, the number of elements in the array.
- 3. The second line contains N space-separated integers, which are the elements of the array.

## **Output Format:**

Print the maximum element in the array.

#### **Constraints:**

```
1 \leq N \leq 100 -10^3 \leq {
m Array \, Elements} \leq 10^3
```

### Input

```
3
5
1 2 3 4 5
3
10 1 21
7
1 1 1 4 90 56 72
```

### Output

5

21

90

### 4. Calculate the Product of Numbers

You are given multiple numbers, each on a new line. Your task is to calculate the product of these numbers and print the result.

## **Input Format:**

- 1. The first line contains an integer N, representing the number of numbers that will follow.
- 2. The next N lines each contain a single integer.

# **Output Format:**

Print the product of all the numbers.

#### **Constraints:**

$$1 \leq N \leq 10$$
  $1 \leq \text{Each Number} \leq 100$ 

### Input

3

2

3

4

#### Output:

24